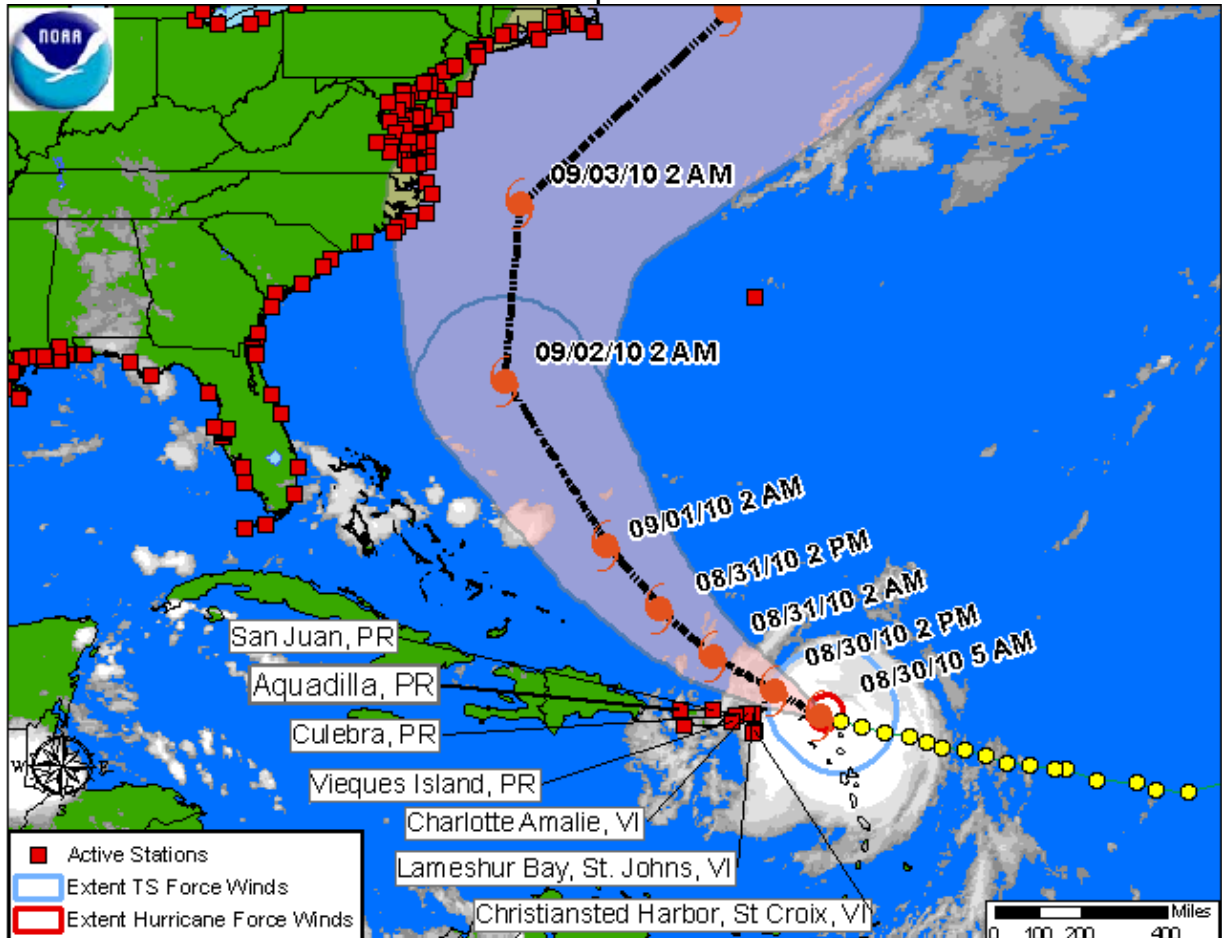




Hurricane EARL QuickLook
Posted: 05:30 AST 08/30/2010

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 08/30/2010 06:00 AST, water levels across the U.S. Virgin Islands and Puerto Rico are about 0.4 to 0.9 feet above predictions.

Wind speeds have been steadily increasing and are generally ranging from 9 to 21 kts with some gusts of 42 to 50 kts reported at Cristiansted Harbor and 34 kts reported at Charlotte Amalie. Barometric pressures continue to decrease across the region.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to Mean Lower Low Water are:

CHRISTIANSTED HARBOR, ST CROIX, VI Next predicted high tides are 0.62 ft (0.19 m) at 08/30/2010 13:18 AST and 0.66 ft (0.20 m) at 08/31/2010 14:53 AST.

LAMESHUR BAY, ST. JOHN, VI Next predicted high tides are 0.72 ft (0.22 m) at 08/30/2010 14:24 AST and 0.40 ft (0.12 m) at 08/31/2010 00:04 AST.

CHARLOTTE AMALIE, VI Next predicted high tides are 0.82 ft (0.25 m) at 08/30/2010 14:50 AST and 0.88 ft (0.27 m) at 08/31/2010 16:12 AST.

CULEBRA, PR Next predicted high tides are 0.94 ft (0.29 m) at 08/30/2010 14:03 AST and 0.66 ft (0.20 m) at 08/31/2010 00:51 AST.

ESPERANZA, VIEQUES ISLAND, PR Next predicted high tides are 0.54 ft (0.16 m) at 08/30/2010 16:40 AST and 0.63 ft (0.19 m) at 08/31/2010 17:31 AST.

SAN JUAN, PR Next predicted high tides are 1.58 ft (0.48 m) at 08/30/2010 14:00 AST and 1.10 ft (0.34 m) at 08/31/2010 01:00 AST.

AQUADILLA, PR Next predicted high tides are 1.31 ft (0.40 m) at 08/30/2010 12:58 AST and 0.92 ft (0.28 m) at 08/31/2010 00:50 AST.

For additional data, please see the [Center for Operational Oceanographic Products & Services](#) website. For more information or archived products and reports, please see the [Storm QuickLook](#) homepage.

Analyst:MPM

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

HURRICANE EARL ADVISORY NUMBER 20

500 AM AST MON AUG 30 2010

...EARL MOVING ACROSS THE NORTHERN LEEWARD ISLANDS...HURRICANE WARNING ISSUED FOR THE U.S. VIRGIN ISLANDS...

AT 500 AM AST THE CENTER OF HURRICANE EARL WAS LOCATED NEAR LATITUDE 18.3 NORTH...LONGITUDE 62.4 WEST ABOUT 50 MI ENE OF ST. MARTIN, ABOUT 170 MI E OF ST. THOMAS.

WATCHES AND WARNINGS

A HURRICANE WARNING IS IN EFFECT FOR...

*** U.S. VIRGIN ISLANDS**

A HURRICANE WATCH IS IN EFFECT FOR...

*** PUERTO RICO INCLUDING THE ISLANDS OF CULEBRA AND VIEQUES**

A TROPICAL STORM WARNING IS IN EFFECT FOR...

*** PUERTO RICO INCLUDING THE ISLANDS OF CULEBRA AND VIEQUES**

HURRICANE CONDITIONS ARE EXPECTED WITHIN THE HURRICANE WARNING AREA...IN THIS CASE WITHIN THE NEXT 12 HOURS. PREPARATIONS TO PROTECT LIFE AND PROPERTY SHOULD HAVE ALREADY BEEN COMPLETED.

HURRICANE CONDITIONS ARE POSSIBLE WITHIN THE WATCH AREA...IN THIS CASE WITHIN THE NEXT 12 TO 24 HOURS.

DISCUSSION AND 48-HOUR OUTLOOK

AT 500 AM AST THE CENTER OF HURRICANE EARL WAS LOCATED NEAR LATITUDE 18.3 NORTH...LONGITUDE 62.4 WEST ABOUT 50 MI ENE OF ST. MARTIN, ABOUT 170 MI E OF ST. THOMAS. EARL IS MOVING TOWARD THE WEST-NORTHWEST NEAR 15 MPH. A TURN TOWARD THE NORTHWEST IS EXPECTED ON TUESDAY. ON THE FORECAST TRACK...THE CENTER OF EARL WILL PASS NEAR OR OVER THE NORTHERNMOST LEEWARD ISLANDS THIS MORNING...AND NEAR THE VIRGIN ISLANDS THIS AFTERNOON AND THIS EVENING.

MAXIMUM SUSTAINED WINDS HAVE INCREASED TO NEAR 105 MPH ...WITH HIGHER GUSTS. EARL IS A CATEGORY TWO HURRICANE ON THE SAFFIR-SIMPSON SCALE. ADDITIONAL STRENGTHENING IS FORECAST...AND EARL IS EXPECTED TO BECOME A MAJOR HURRICANE BY TONIGHT OR EARLY TUESDAY.

HURRICANE FORCE WINDS EXTEND OUTWARD UP TO 50 MILES FROM THE CENTER...AND TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 175 MILES.

THE ESTIMATED MINIMUM CENTRAL PRESSURE IS 969 MB...28.61 INCHES.

HAZARDS AFFECTING LAND

WIND...HURRICANE CONDITIONS ARE NOW SPREADING INTO THE NORTHERN LEEWARD ISLANDS...AND WILL SPREAD WESTWARD INTO THE VIRGIN ISLANDS LATER TODAY. TROPICAL STORM CONDITIONS ARE EXPECTED TO SPREAD OVER PUERTO RICO TODAY...WITH HURRICANE CONDITIONS POSSIBLE THIS EVENING AND TONIGHT.

STORM SURGE...STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 2 TO 4 FEET ABOVE GROUND LEVEL PRIMARILY NEAR THE COAST IN AREAS OF ONSHORE WIND WITHIN THE HURRICANE WARNING AREA...AND 1 TO 3 FEET IN THE TROPICAL STORM WARNING AREA. THE SURGE WILL BE ACCOMPANIED BY LARGE AND DANGEROUS BATTERING WAVES.

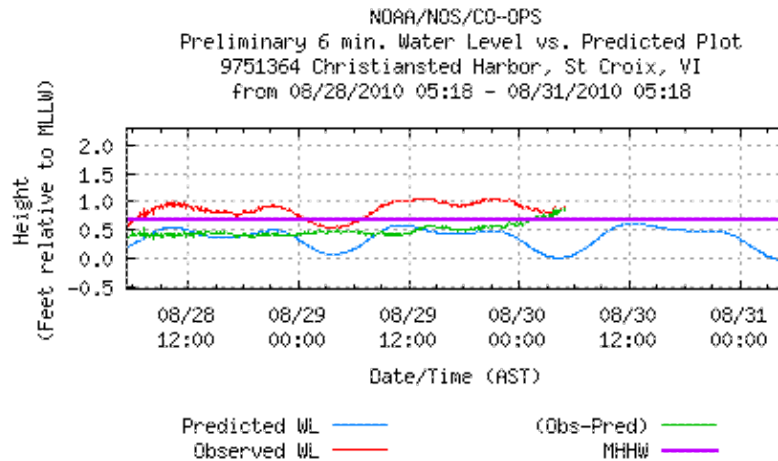
FORECASTER BRENNAN

Hurricane EARL QuickLook, POSTED 05:30 AST 08/30/2010

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Christiansted Harbor, St Croix - Water Level](#), [Christiansted Harbor, St Croix - Winds](#), [Christiansted Harbor, St Croix - Barometric](#), [Christiansted Harbor, St Croix - Air/Water Temp](#), [Lameshur Bay, St. John - Water Level](#), [Lameshur Bay, St. John - Air/Water Temp](#), [Charlotte Amalie - Water Level](#), [Charlotte Amalie - Winds](#), [Charlotte Amalie - Barometric](#), [Charlotte Amalie - Air/Water Temp](#), [Culebra - Water Level](#), [Culebra - Winds](#), [Culebra - Barometric](#), [Culebra - Air/Water Temp](#), [Esperanza, Vieques Island - Water Level](#), [Esperanza, Vieques Island - Winds](#), [Esperanza, Vieques Island - Barometric](#), [Esperanza, Vieques Island - Air/Water Temp](#), [San Juan - Water Level](#), [San Juan - Winds](#), [San Juan - Barometric](#), [San Juan - Air/Water Temp](#), [Aguadilla - Water Level](#), [Aguadilla - Barometric](#), [Aguadilla - Air/Water Temp](#),

Christiansted Harbor, St Croix, VI - [Return to List](#)

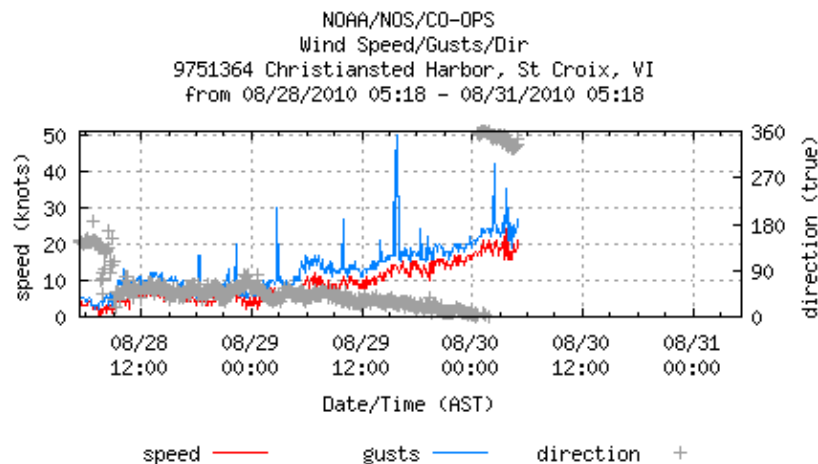


Last Observed Sample: 08/30/2010 05:00 (AST)

Relative to **MLLW**: **Observed: 0.90 ft.** **Predicted: 0.02 ft.** **Residual: 0.88 ft.**

Historical Maximum Water Level: Oct 13 2006, 0.73 ft. above **MHHW**

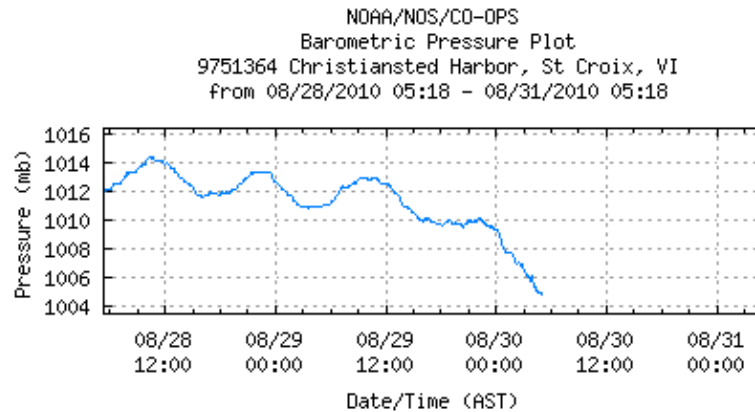
Christiansted Harbor, St Croix, VI - [Return to List](#)



Last Observed Sample: 08/30/2010 05:00 (AST)

Wind Speed: 21 knots **Gusts: 27 knots** **Direction: 344° T**

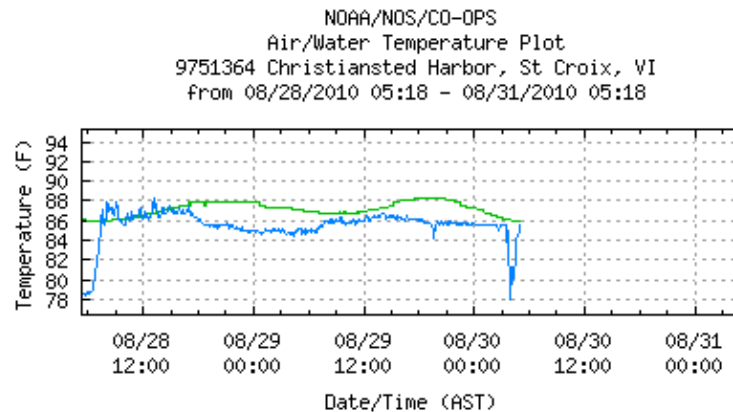
Christiansted Harbor, St Croix, VI - [Return to List](#)



Last Observed Sample: 08/30/2010 05:00 (AST)

Barometric Pressure: 1004.8 mb

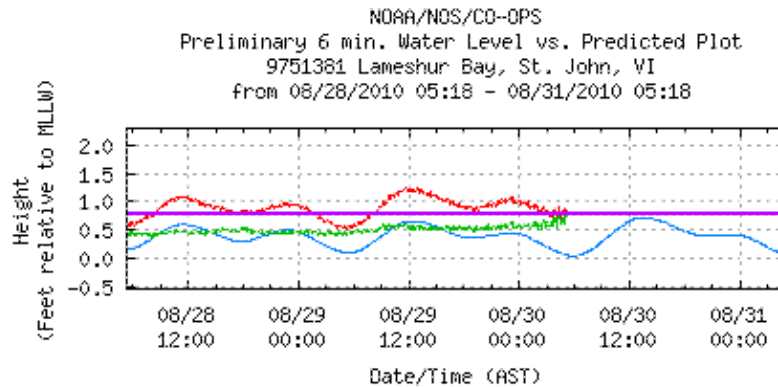
Christiansted Harbor, St Croix, VI - [Return to List](#)



Last Observed Sample: 08/30/2010 05:00 (AST)

Water Temperature: 86.0° F Air Temperature: 85.5° F

Lameshur Bay, St. John, VI - [Return to List](#)



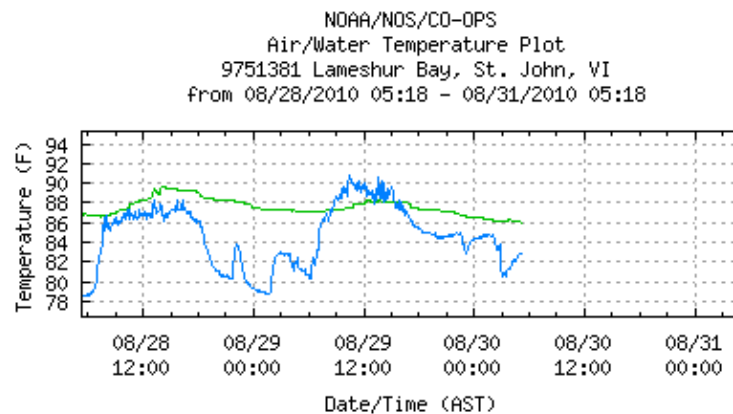
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 08/30/2010 05:06 (AST)

Relative to **MLLW**: **Observed: 0.81 ft.** **Predicted: 0.06 ft.** **Residual: 0.75 ft.**

Historical Maximum Water Level: Nov 6 2006, 0.83 ft. above **MHHW**

Lameshur Bay, St. John, VI - [Return to List](#)

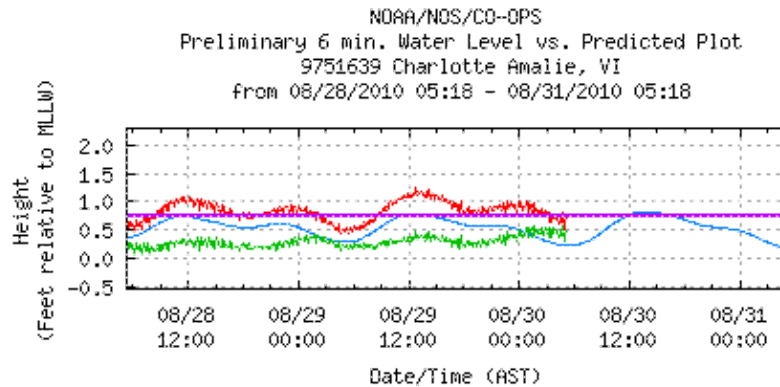


water temp. — air temp. —

Last Observed Sample: 08/30/2010 05:06 (AST)

Water Temperature: 86.0° F **Air Temperature: 82.8° F**

Charlotte Amalie, VI - [Return to List](#)



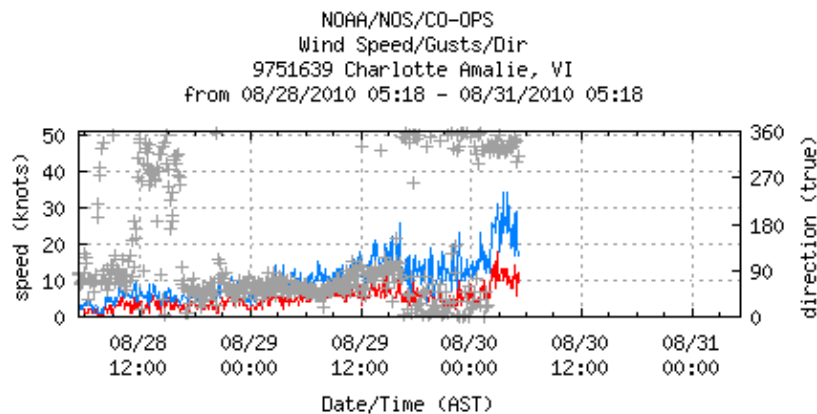
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 08/30/2010 05:06 (AST)

Relative to **MLLW**: **Observed: 0.70 ft. Predicted: 0.23 ft. Residual: 0.47 ft.**

Historical Maximum Water Level: Sep 16 1995, 2.93 ft. above **MHHW**

Charlotte Amalie, VI - [Return to List](#)

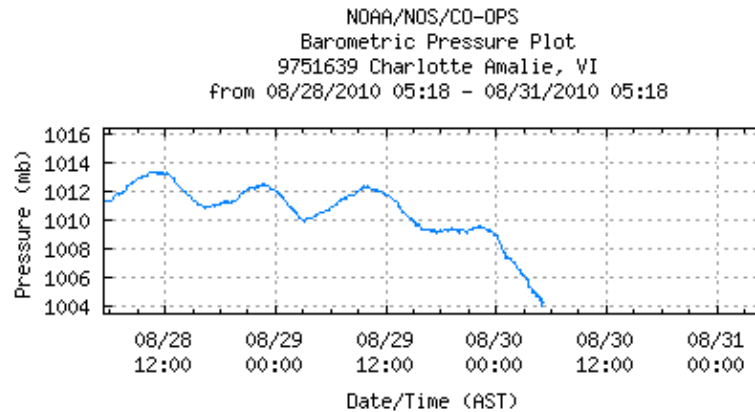


speed — gusts — direction +

Last Observed Sample: 08/30/2010 05:06 (AST)

Wind Speed: 12 knots Gusts: 17 knots Direction: 312° T

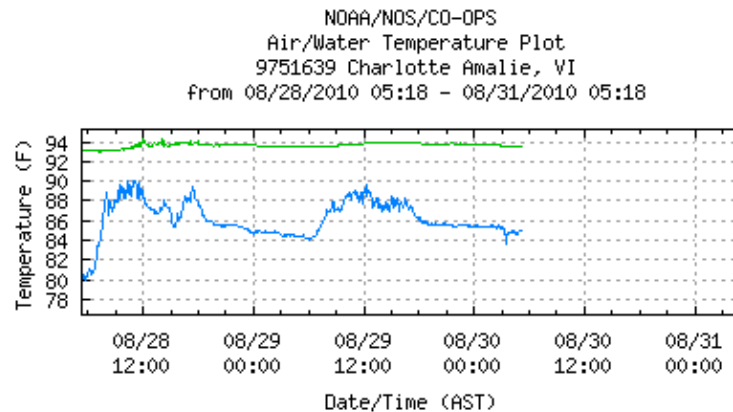
Charlotte Amalie, VI - [Return to List](#)



Last Observed Sample: 08/30/2010 05:06 (AST)

Barometric Pressure: 1004.3 mb

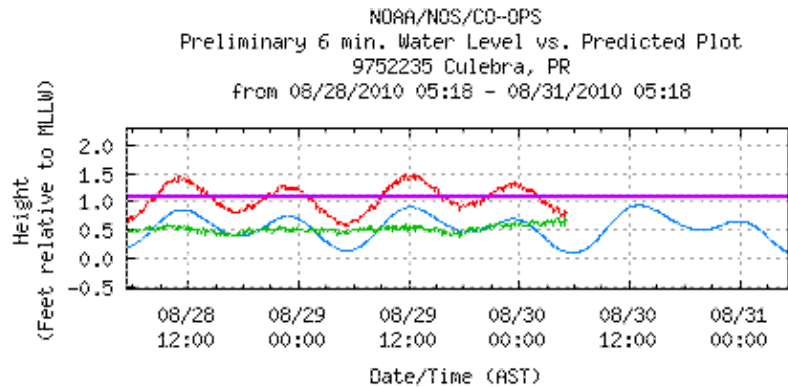
Charlotte Amalie, VI - [Return to List](#)



Last Observed Sample: 08/30/2010 05:06 (AST)

Water Temperature: 93.6° F Air Temperature: 85.0° F

Culebra, PR - [Return to List](#)

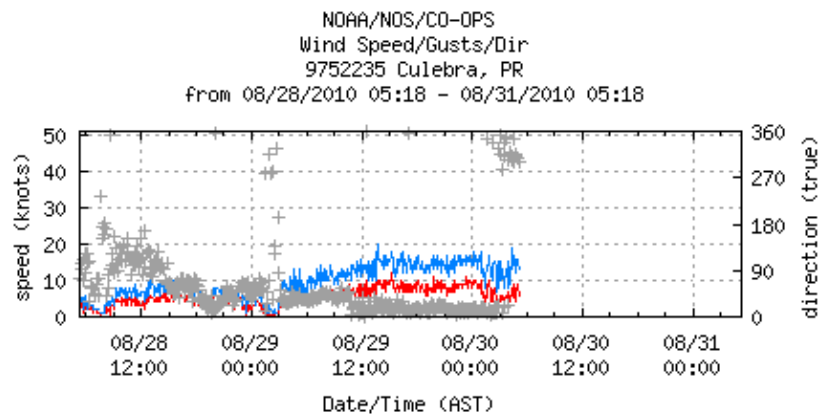


Last Observed Sample: 08/30/2010 05:06 (AST)

Relative to **MLLW**: **Observed: 0.80 ft.** **Predicted: 0.11 ft.** **Residual: 0.69 ft.**

Historical Maximum Water Level: Nov 6 2006, 0.86 ft. above **MHHW**

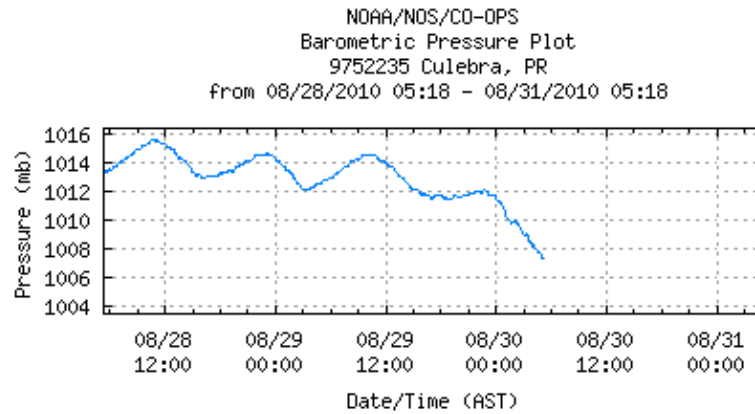
Culebra, PR - [Return to List](#)



Last Observed Sample: 08/30/2010 05:06 (AST)

Wind Speed: 6 knots **Gusts: 13 knots** **Direction: 301° T**

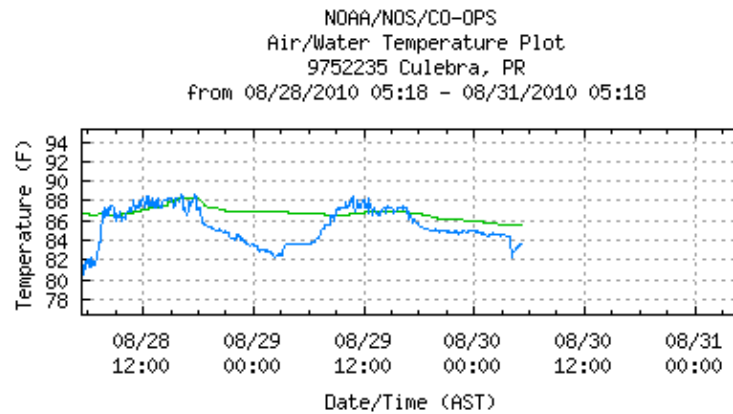
Culebra, PR - [Return to List](#)



Last Observed Sample: 08/30/2010 05:06 (AST)

Barometric Pressure: 1007.3 mb

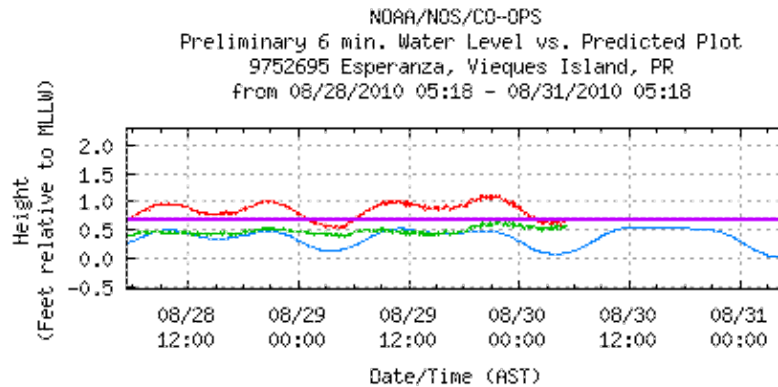
Culebra, PR - [Return to List](#)



Last Observed Sample: 08/30/2010 05:06 (AST)

Water Temperature: 85.5° F Air Temperature: 83.7° F

Esperanza, Vieques Island, PR - [Return to List](#)

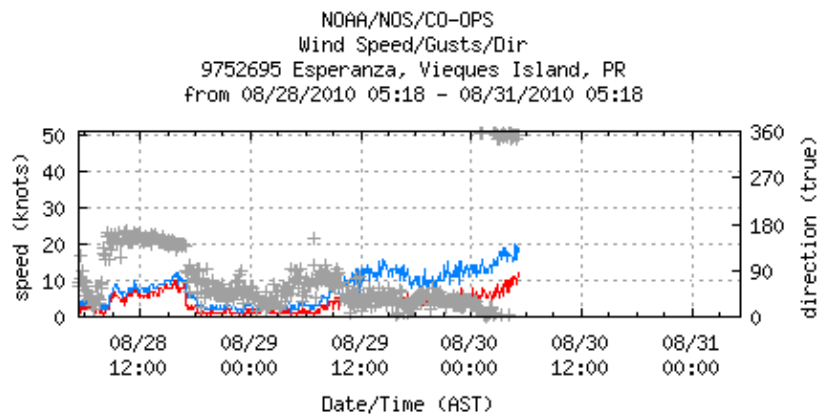


Last Observed Sample: 08/30/2010 05:06 (AST)

Relative to **MLLW**: **Observed: 0.67 ft.** **Predicted: 0.09 ft.** **Residual: 0.58 ft.**

Historical Maximum Water Level: Oct 13 2006, 0.83 ft. above **MHHW**

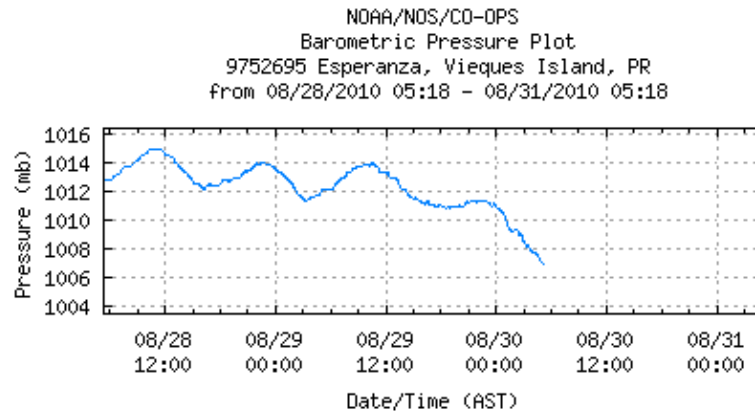
Esperanza, Vieques Island, PR - [Return to List](#)



Last Observed Sample: 08/30/2010 05:06 (AST)

Wind Speed: 12 knots **Gusts: 19 knots** **Direction: 352° T**

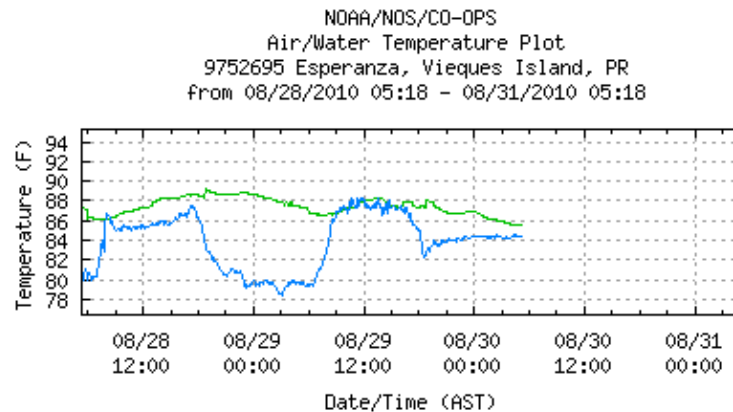
Esperanza, Vieques Island, PR - [Return to List](#)



Last Observed Sample: 08/30/2010 05:06 (AST)

Barometric Pressure: 1006.9 mb

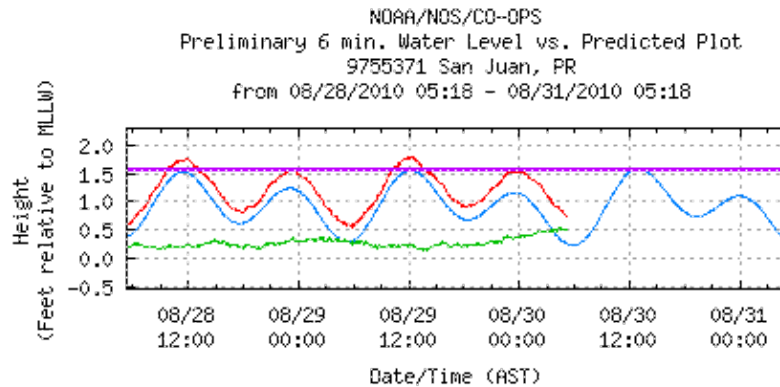
Esperanza, Vieques Island, PR - [Return to List](#)



Last Observed Sample: 08/30/2010 05:06 (AST)

Water Temperature: 85.5° F Air Temperature: 84.4° F

San Juan, PR - [Return to List](#)

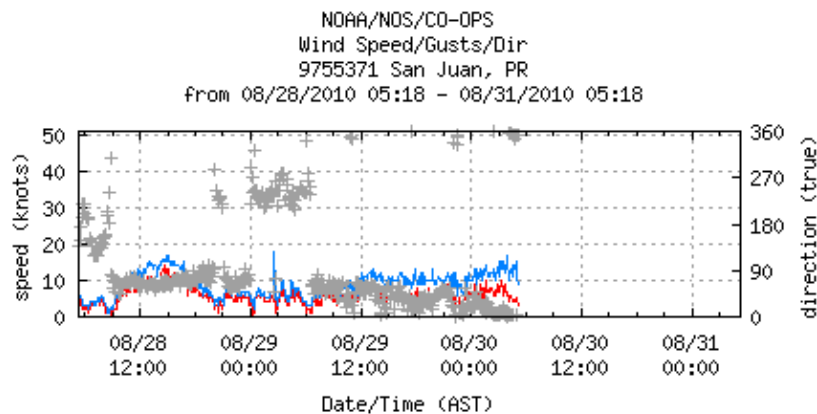


Last Observed Sample: 08/30/2010 05:06 (AST)

Relative to **MLLW**: **Observed: 0.76 ft.** **Predicted: 0.26 ft.** **Residual: 0.50 ft.**

Historical Maximum Water Level: Sep 21 1998, 1.21 ft. above **MHHW**

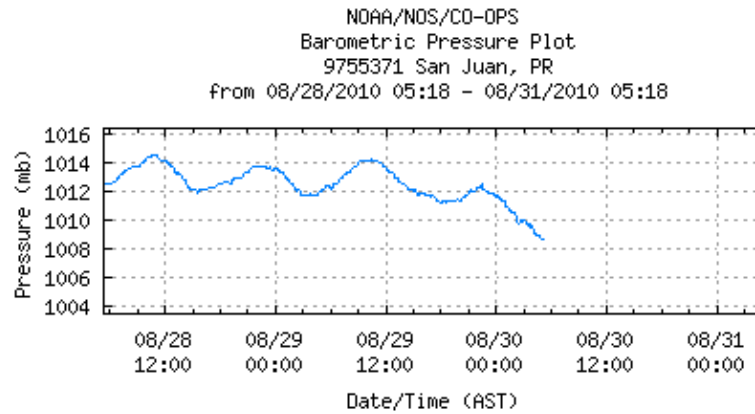
San Juan, PR - [Return to List](#)



Last Observed Sample: 08/30/2010 05:06 (AST)

Wind Speed: 3 knots **Gusts: 9 knots** **Direction: 352° T**

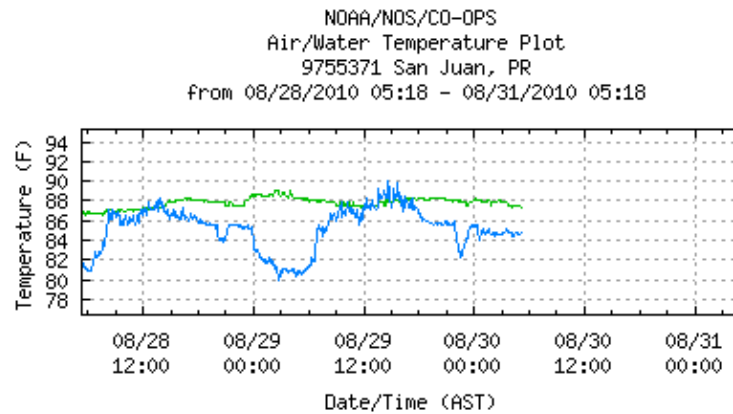
San Juan, PR - [Return to List](#)



Last Observed Sample: 08/30/2010 05:06 (AST)

Barometric Pressure: 1008.7 mb

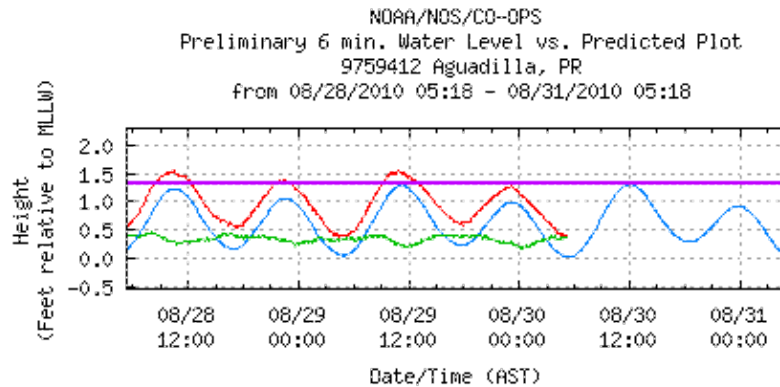
San Juan, PR - [Return to List](#)



Last Observed Sample: 08/30/2010 05:06 (AST)

Water Temperature: 87.4° F Air Temperature: 84.7° F

Aguadilla, PR - [Return to List](#)



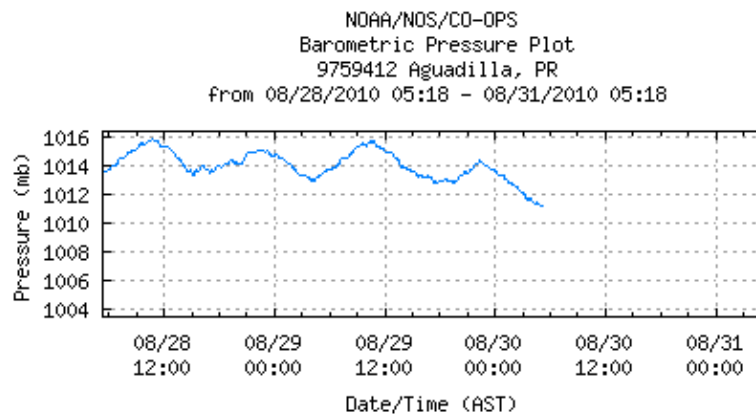
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 08/30/2010 05:06 (AST)

Relative to **MLLW**: **Observed: 0.40 ft.** **Predicted: 0.04 ft.** **Residual: 0.36 ft.**

Historical Maximum Water Level: Oct 28 2007, 0.95 ft. above **MHHW**

Aguadilla, PR - [Return to List](#)



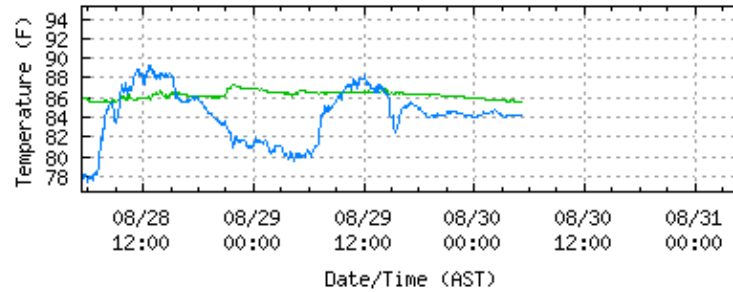
barometric pressure —

Last Observed Sample: 08/30/2010 05:06 (AST)

Barometric Pressure: 1011.2 mb

Aguadilla, PR - [Return to List](#)

NOAA/NOS/CO-OPS
Air/Water Temperature Plot
9759412 Aguadilla, PR
from 08/28/2010 05:18 - 08/31/2010 05:18



water temp. — air temp —

Last Observed Sample: 08/30/2010 05:06 (AST)

Water Temperature: 85.6° F Air Temperature: 84.2° F

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)
National Oceanic and Atmospheric Administration | U.S. Department of Commerce